In the Claims:

Claims 1-36 (cancelled).

Claim 37 (currently amended) A fuel concentration increasing device for increasing the concentration of a fuel in a liquid mixture of a fuel and a carrier component comprising:

at least one fuel storage device which comprises walls and in which the fuel is storable; and

at least one throughflow device which is disposed in the interior of the fuel storage device for conducting the mixture of fuel and carrier component through the fuel storage device, wherein the throughflow device comprises walls, wherein portions of these walls are arranged as a throughflow channel situated in the interior of the fuel storage device inside of and at a distance from the walls of the fuel storage device, and wherein these portions of walls are configured as at least one membrane which is permeable or semi-permeable for the fuel but not for the carrier component ~~or is configured as such a membrane~~ so that, because of the transport properties of the membrane, fuel can be added passively to the liquid mixture of fuel and carrier component in order to increase the concentrations of the fuel in said mixture of fuel and carrier component on its path through the throughflow device.

Claim 38 (previously presented) The device according to claim 37, wherein the device is disposed on a fuel cell and/or has a fuel exchange connection to a fuel cell for exchanging the mixture of fuel and carrier component.

Claim 39 (previously presented) The device according to claim 37, wherein the fuel cell is a direct alcohol fuel cell.

Claim 40 (previously presented) The device according to claim 37, wherein the fuel cell comprises a cathode, and water produced on the cathode of the fuel cell can be coupled into the mixture of fuel and carrier component.

Claim 41 (previously presented) The device according to claim 37, wherein a heating device is disposed on the device in order to heat fuel stored in the fuel storage device and/or the mixture of fuel and carrier component and/or in that the device is connected thermally or physically to a fuel cell.

Claim 42 (previously presented) The device according to claim 37, wherein heat insulation is integrated in the fuel storage device or disposed thereon.

Claim 43 (previously presented) The device according to claim 42, wherein the heat insulation contains or comprises insulating material and/or in that the heat insulation has walls together with a vacuum situated therebetween.

Claim 44 (previously presented) The device according to claim 37, wherein the mixture of carrier component and fuel can be conducted through the throughflow device more than once for a multiple increase in the concentration of the fuel in the mixture, wherein said multiple conducting through the throughflow device is realized with help of a throughflow loop.

Claim 45 (previously presented) The device according to claim 37, wherein the fuel storage device contains or comprises a container and/or a tank.

Claim 46 (previously presented) The device according to claim 37, wherein the fuel storage device contains fuel in pure or in concentrated form.

Claim 47 (previously presented) The device according to claim 37, wherein the fuel storage device contains fuel in a carrier component, the fuel being present in 50 to 100 per cent concentration.

Claim 48 (previously presented) The device according to claim 37, wherein at least one support device and/or stabilizing device is disposed in the fuel storage device.

Claim 49 (previously presented) The device according to claim 48, wherein at least one of the disposed support or stabilizing devices contains or comprises foamed material.

Claim 50 (previously presented) The device according to claim 37, wherein the membrane comprises a perfluorosulphonic acid/polytetrafluoroethylene copolymer in acidic (H^+) form.

Claim 51 (previously presented) The device according to claim 37, wherein the throughflow rate for the mixture of carrier component and fuel through the throughflow device has an order of magnitude in the range of 0.1 ml/min to 1000 ml/min.

Claim 52 (previously presented) The device according to claim 37, wherein a support device is disposed on or around the throughflow device in order to achieve an arbitrary spatial orientation of the throughflow device.

Claim 53 (previously presented) The device according to claim 52, wherein the support device comprises foamed material.

Claim 54 (canceled)

Claim 55 (previously presented) The device according to claim 54, wherein the channel has a circular cross-section.

Claim 56 (previously presented) The device according to claim 37, wherein at least one filter is disposed in the throughflow device.

Claim 57 (previously presented) The device according to claim 37, wherein the carrier component and/or the fuel comprises a liquid.

Claim 58 (previously presented) The device according to claim 37, wherein the carrier component comprises water, water vapor and/or a mixture thereof with further materials.

Claim 59 (previously presented) The device according to claim 58, wherein the carrier component comprises an acid.

Claim 60 (previously presented) The device according to claim 37, wherein the fuel comprises an alcohol.

Claim 61 (previously presented) The device according to claim 60, wherein the fuel comprises methanol and/or ethanol.

Claim 62 -70 (canceled)

Claim 71(previously presented) The device according to claim 39, wherein the direct alcohol fuel cell is a direct methanol fuel cell.

Claim 72 (previously presented) The device according to claim 44, wherein said throughflow loop comprises a spiral.